REMARKS

Claims in the case are 2-15, 18, 20 and 22-24. Claim 2 has been amended herein. No claims have been added, and no claims have been cancelled herein.

Claim 2, the only independent claim in the case, has been amended to replace "consisting essentially of" with --consisting of--.

Claims 2-15, 18, 20 and 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatenable over European Patent Application No. EP 0 728 811 (**Maruyama et al**) in view of United States Patent No. 5,849,827 (**Bödiger et al**). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

The thermoplastic molding composition of Applicants' claims consists of: (A) an aromatic polycarbonate and/or polyester carbonate; (B) a graft polymer; (C) optionally a thermoplastic vinyl (co)polymer and/or polyalkylene terephthalate; (D) a phosphazene selected from those represented by formulas Ia and/or Ib (see Claim 2); (E) finely divided inorganic powder having an average particle diameter of less than or equal to 200 nm; (F) optionally a fluorinated polyolefin; and (G) optionally at least one additive, e.g., a lubricant and/or mold release agent.

The thermoplastic compositions according to Applicants' present claims provide a desirable combination of:

(i) excellent flame resistance; and

(ii) improved physical properties including, improved weld-line strength, notched impact strength and environmental stress cracking resistance.

Applicants wish to direct attention to the Declaration included in the Appendix herewith. The results summarized in the Table on page 4 of the Declaration show that compositions according to the present invention (i.e., Examples 2 and 3), which include a phosphazene and finely divided aluminum hydroxide provide a combination of excellent flame resistance and substantially improved physical properties, such as notched impact resistance (a_k values) and weld line strength (a_n values) relative to the compositions of Comparative Examples 4-8, and Comparative Examples 6 and 8 in particular. The compositions of Examples 2 and 3 contain phosphazene but no phosphorous compounds. The compositions of Comparative

Examples 4-8 contain phosphorous compounds and finely divided aluminum hydroxide, but no phosphazene. The compositions according to the present invention, as represented by Examples 2 and 3, provide minimal variation in physical properties as the level of phosphazene compound changes (11 and 13 pbw). However, the compositions of Comparative Examples 6-8 provide a wider variation in physical properties as the level of phosphorous compound changes (11, 12 and 13 pbw).

Maruyama et al disclose thermoplastic resin compositions comprising an aromatic polycarbonate, a graft copolymer and a phosphazene (abstract). The compositions of Maruyama et al are disclosed as optionally containing additives, including fillers, such as talc (page 5, lines 15-19). Maruyama et al do not disclose or suggest the particle size of the fillers that may optionally be present in their thermoplastic resin compositions. Applicants wish to point out that commercially available talc typically has an average particle size in excess of 200 nm. In particular, commercially available talcs typically have average particle size diameters (d_{50} values) of 0.5 μm (500 nm) to 8 μm (8000 nm). Commercial talc data sheets, in support of the preceding remarks, were previously submitted to the Office in an Appendix to an Amendment in the present case dated 1 October 2002.

Maruyama et al disclose and teach that compositions containing phosphorous compounds (e.g., trixlenyl phosphate) and phosphoric esters (e.g., phosphoric ester oligomers) are undesirable in that they suffer from physical and processing problems, e.g., reduction in heat resistance and oozing of the phosphorous compounds. See page 2, lines 27-30 of Maruyama et al.

Maruyama et al provide no disclosure, suggestion or teaching as to a composition that includes a blend of phosphazenes and non-phosphazene phosphorous compounds. What Maruyama et al clearly shows and teaches is that their thermoplastic compositions which contain phosphazenes provide improved flame resistance relative to comparative compositions that contain non-phosphazene phosphorous compounds, such as trixylenyl phosphate. In addition, Maruyama et al describe compositions that contain nonphosphazene phosphorous

compounds, such as phosphoric acid esters, as suffering from physical and processing problems, e.g., reduction in heat resistance and oozing of the phosphorous compounds.

Applicants respectfully submit that in light of what Maruyama et al actually discloses, one of ordinary skill in the art would not reasonably be expected to interpret Maruyama et al's disclosure as representing in any way a suggestion to blend phosphazene and non-phosphazene phosphorous compounds.

Bödiger et al disclose a thermoplastic molding composition comprising aromatic polycarbonate; extremely finely divided inorganic powder, e.g., aluminum oxides and TiO_2, having a mean particle diameter of 0.1 to 100 nm; and a flame retardant (abstract and column 7, lines 24-53). The phosphorous compounds of Bödiger et al are disclosed as preferably including those represented by formula (VIII) in column 8. However, Bödiger et al do not disclose or suggest the use of phosphazenes in their compositions, or replacing the phosphorous compounds of their compositions with phosphazenes.

If Maruyama et al and Bödiger et al were combined, such a combination would not result in the thermoplastic molding composition of Applicants' present claims. The combination of Maruyama et al and Bödiger et al would necessarily result in a composition containing both phosphazenes and non-phosphazene phosphorous compounds. The thermoplastic composition of Applicants' present claims include closed-end transitional language ("consisting of"), and as such is exclusive of effective amounts of non-phosphazene phosphorous compounds.

In addition, neither Maruyama et al nor Bödiger et al suggest the desirable combination of physical properties that are provided by the compositions of Applicants' claimed invention. As discussed previously herein, the thermoplastic compositions according to Applicants' present claims provide a desirable combination of: (i) excellent flame resistance; and (ii) improved physical properties including, improved weld-line strength and notched impact strength.

Whether a particular combination might be obvious to try is not a legitimate test of patentability. In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988). Obviousness is tested by what the combined teaching of the references would have suggested to those of ordinary skill in the art. *Id.* Obviousness cannot be established by

combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. *Id.* The teachings of references can be combined only if there is some suggestion or incentive to do so. *Id.*

Bödiger et al do not disclose or suggest the use of phosphazenes in their compositions or replacing phosphorous flame retardants with phosphazene flame retardants. Maruyama et al clearly disclose the necessary presence of phosphazenes in their compositions. Maruyama et al further disclose that the use of phosphorous compounds other than phosphazenes, such as those phosphorous compounds disclosed by Bödiger et al and represented by their formula (VIII) is undesirable due to resulting poor physical properties. As such neither Maruyama et al nor Bödiger et al provide the requisite teaching that would motivate one of ordinary skill in the art to combine their respective disclosures.

As the Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are (1) the nature of the problem to be solved, (2) the teaching of the prior art, and (3) the knowledge of persons of ordinary skill in the art, In re Rouffet, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that neither of the patents relied upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Maruyama et al and Bödiger et al. Reconsideration and withdrawal of the present rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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APPENDIX

Declaration of Dr. Thomas Eckel.